

# Claims

- [c1] 1. A method for IP address allocation of an IP-based extension, the method comprising:  
connecting the IP-based extension to a network private branch exchange (NPBX) host, the NPBX host being connected to the Internet through a static IP address; and  
the NPBX host allocating an IP address to the IP-based extension only when the IP-based extension is connected to the NPBX host.
- [c2] 2. The method of claim 1 wherein the NPBX host resets the IP-based extension after the IP-based connects to the NPBX host.
- [c3] 3. The method of claim 1 wherein the IP-based extension is connected to the NPBX host through a network cable according to the IEEE 802.3 protocol.
- [c4] 4. The method of claim 1 wherein the IP-based extension is wirelessly connected to the NPBX host through an access point according to the IEEE 802.11 protocol.
- [c5] 5. The method of claim 1 wherein the IP-based extension is connected to the NPBX host through the Internet.

- [c6] 6. The method of claim 5 wherein the IP-based extension is connected to the Internet through a network cable according to the IEEE 802.3 protocol.
- [c7] 7. The method of claim 5 wherein the IP-based extension is wirelessly connected to the Internet through an access point according to the IEEE 802.11 protocol.
- [c8] 8. The method of claim 5 wherein users key in the IP address of the NPBX host, select a security level, and key in a password to confirm the connection between the NPBX host and the IP-based extension.
- [c9] 9. The method of claim 1 wherein when the IP-based extension is connected to the NPBX host, the IP-based extension downloads information from the NPBX host and uploads information to the NPBX host.
- [c10] 10. The method of claim 9 wherein the IP-based extension downloads the IP address allocated by the NPBX host, the static IP address of the NPBX host, and data of the medium access control (MAC) layer in the transmission protocol from the NPBX host.
- [c11] 11. The method of claim 9 wherein the IP-based extension uploads data of the MAC layer in the transmission protocol to the NPBX host.